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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,635	01/23/2001	Terence J. Nelson	MATI-194US	3429
23122	7590	03/14/2005	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			NGUYEN, MINH DIEU T	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/767,635	<b>Applicant(s)</b> NELSON, TERENCE J.	
	<b>Examiner</b> Minh Dieu Nguyen	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the amendment dated November 3, 2004 with the amendments to claims 1, 8 and 13.

Claims 1-15 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments focus on the combination of features introduced by the amendment with elements that already existed in the claims. The new material is rendered obvious by Fridrich (6,101,602).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5, 7-8, 10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conover et al. (6,373,960) in view of Fridrich (6,101,602).

a) As to claims 1, 7 and 12-13, Conover discloses device and method used in detecting unauthorized copying of compressed digital video data comprising means for reading sequential data objects of the digital work, at least one of the data objects including multiple members, each of the multiple members representing a distinct analog output signal (col. 2, lines 18-65; col. 3, lines 12-26); means of transforming the selected data objects, including the one member, into an analog signal, Conover discloses each macroblock includes 8x8 Discrete Cosine Transform (DCT) in which digital type data are converted to analog signals of frequency components and then a watermark converted by the same method is embedded (Fig.2); means for selecting one member from among the multiple members for the at least one of the data objects according to a digital identifier for the apparatus (col. 14, lines 55-67 to col. 15, lines 1-4), wherein the digital identifier is coded by the selection of the one member from each of the at least one of the data objects.

However, Conover does not disclose at least one of the data objects including multiple artistically equivalent members (i.e. Conover does not disclose that the unwatermarked version is "artistically equivalent" to the watermarked version).

Fridrich discloses a method for injecting invisible robust watermarks into digital images comprising at least one of the data objects including multiple artistically equivalent members (col. 7, line 55 to col. 8, line 15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having at least one of the data objects including multiple

artistically equivalent members in the system of Conover as Fridrich teaches so as to maintain the perceived quality of the digital work.

b) As to claims 5, 10 and 14, Conover discloses the apparatus wherein the digital work is a DVD video title (col. 2, lines 12-13).

c) As to claim 8, Conover discloses a method for tracing an analog copy of a digital work to apparatus that produced the analog copy comprising the steps of: determining the original digital work from which the analog copy was produced, the original digital work including a plurality of sets of digital objects, each digital object including a set of members (Fig. 1); determining a sequence of data objects that produced the analog copy, each data object corresponding to a respective segment of the analog copy (Fig. 2); comparing the segments of the analog copy to the plurality sets of data objects of the original digital work to determine if each segment corresponds to a data object having a plurality of members and for each such data object, determining which of the plurality of members corresponds to the segment in the analog work (Fig.7); creating a digital identifier from a sequence of the respective members that corresponds to the respective segments of the analog work and using the digital identifier to identify the apparatus that made the analog copy of the digital work (col. 14, lines 55-67 to col. 15, lines 1-17).

However, Conover does not disclose at least one of the data objects including multiple artistically equivalent members (i.e. Conover does not disclose that the unwatermarked version is "artistically equivalent" to the watermarked version).

Fridrich discloses a method for injecting invisible robust watermarks into digital images comprising at least one of the data objects including multiple artistically equivalent members (col. 7, line 55 to col. 8, line 15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having at least one of the data objects including multiple artistically equivalent members in the system of Conover as Fridrich teaches so as to maintain the perceived quality of the digital work.

d) As to claim 12, Conover discloses the method wherein the apparatus is assigned to at least one custodian, and the digital identifier is also used to identify the at least one custodian (col. 14, lines 55-67 to col. 15, lines 1-4).

5. Claim 6, 9, 11 and 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Conover et al. (6,373,960) in view of Fridrich (6,101,602) and further in view of Collart (6,665,489).

a) As to claim 9, Conover discloses identifying precisely a source from which an unauthorized copy originates by having the set top box encodes into uncompressed analog video signal a unique watermark identification which uniquely identifies set top box (col. 14, lines 57-61). He also discloses the confidentiality of data contained in the site data list may be protected by other means such as by encryption (col. 15, lines 39-41).

Collart discloses a system for tracking the distribution of content electronically wherein the confidentiality of data which reads on digital identifier is encrypted using

asymmetric crypto system in which one key is used for encryption and the other for decryption (col. 32, lines 27-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of encryption as Collart teaches, in the system of Conover and Fridrich to strengthen the system security.

b) As to claims 6, 11 and 15, Collart discloses the system wherein the digital work is a software game (col. 6, lines 4-6).

### ***Allowable Subject Matter***

6. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior arts of Conover, Fridrich and Collart do not teach apparatus according to claim 1 wherein selecting one of the multiple members from each data object responsive to the digit and each of the data objects having multiple members has two members.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 703-305-9727. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 703-306-3036. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Minh Dieu Nguyen  
Examiner  
Art Unit 2137

mdn  
3/2/05

A handwritten signature in black ink, appearing to read "Andrew Caldwell", with a stylized flourish at the end.

**ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER**